

How Fast Can America Grow?

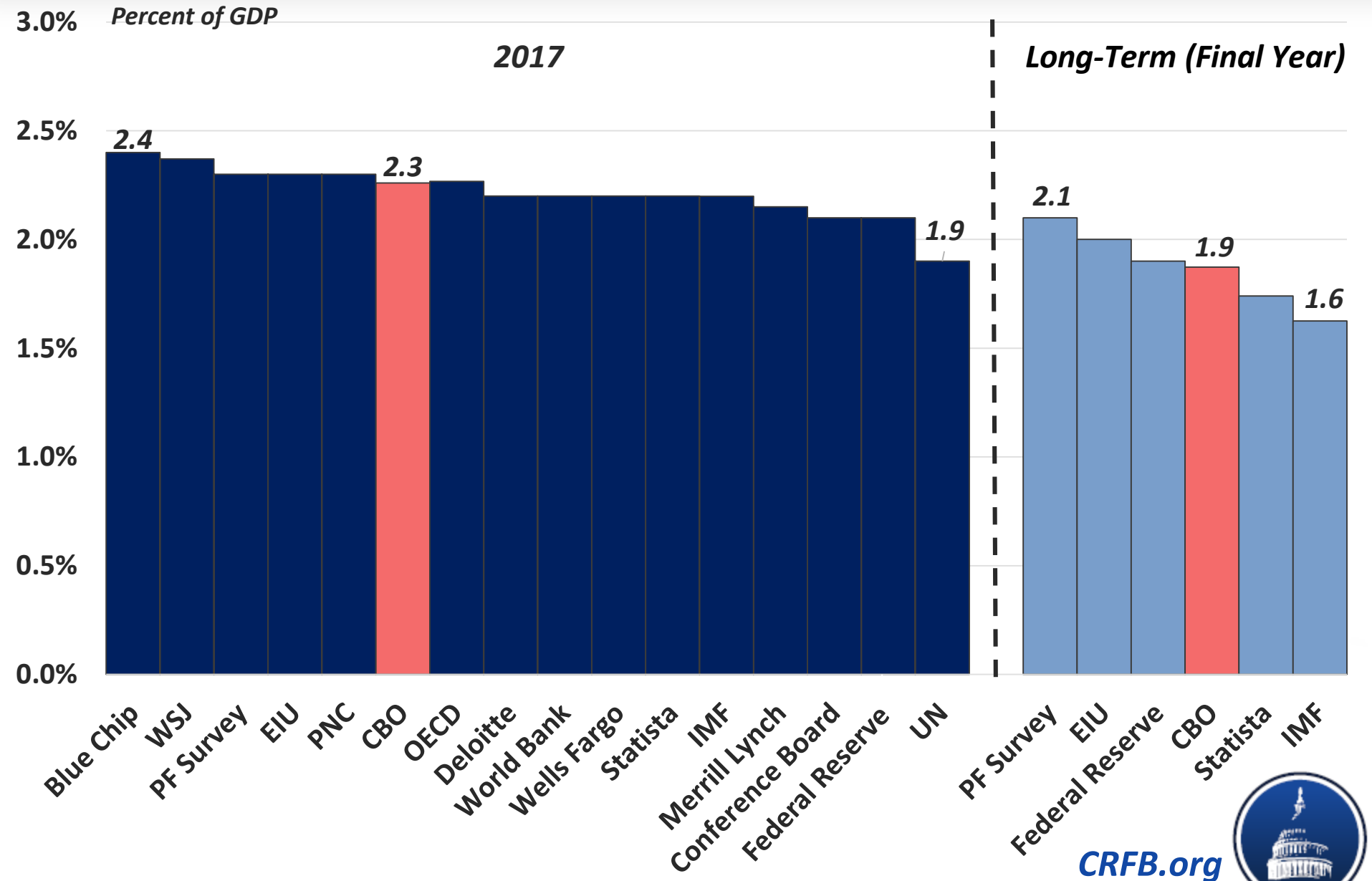
May 2017



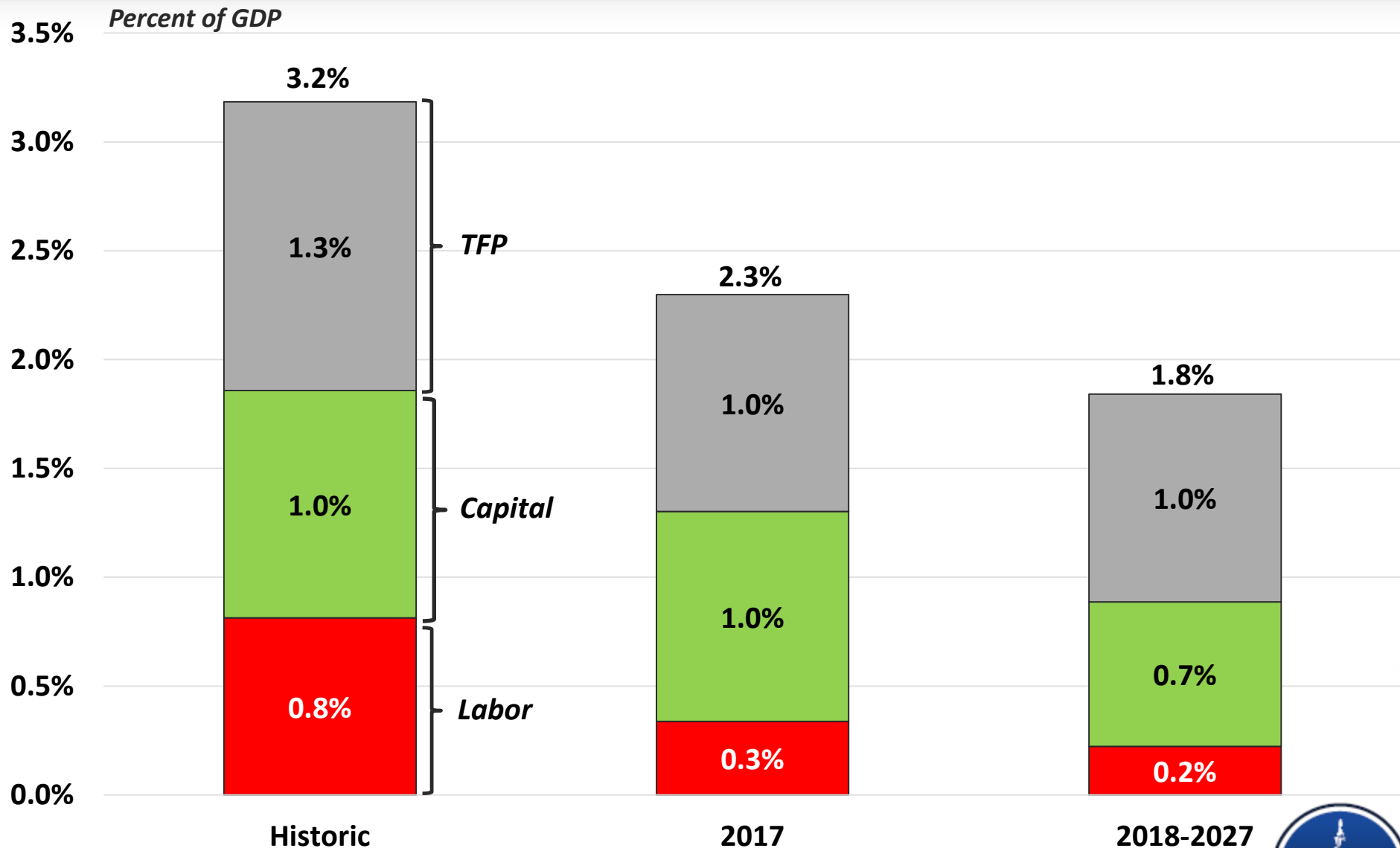
**COMMITTEE FOR A
RESPONSIBLE FEDERAL BUDGET**

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How Fast Are We Projected to Grow?



How Fast Are We Projected to Grow?



Sources: CBO, CRFB calculations.

TFP= Total Factor Productivity

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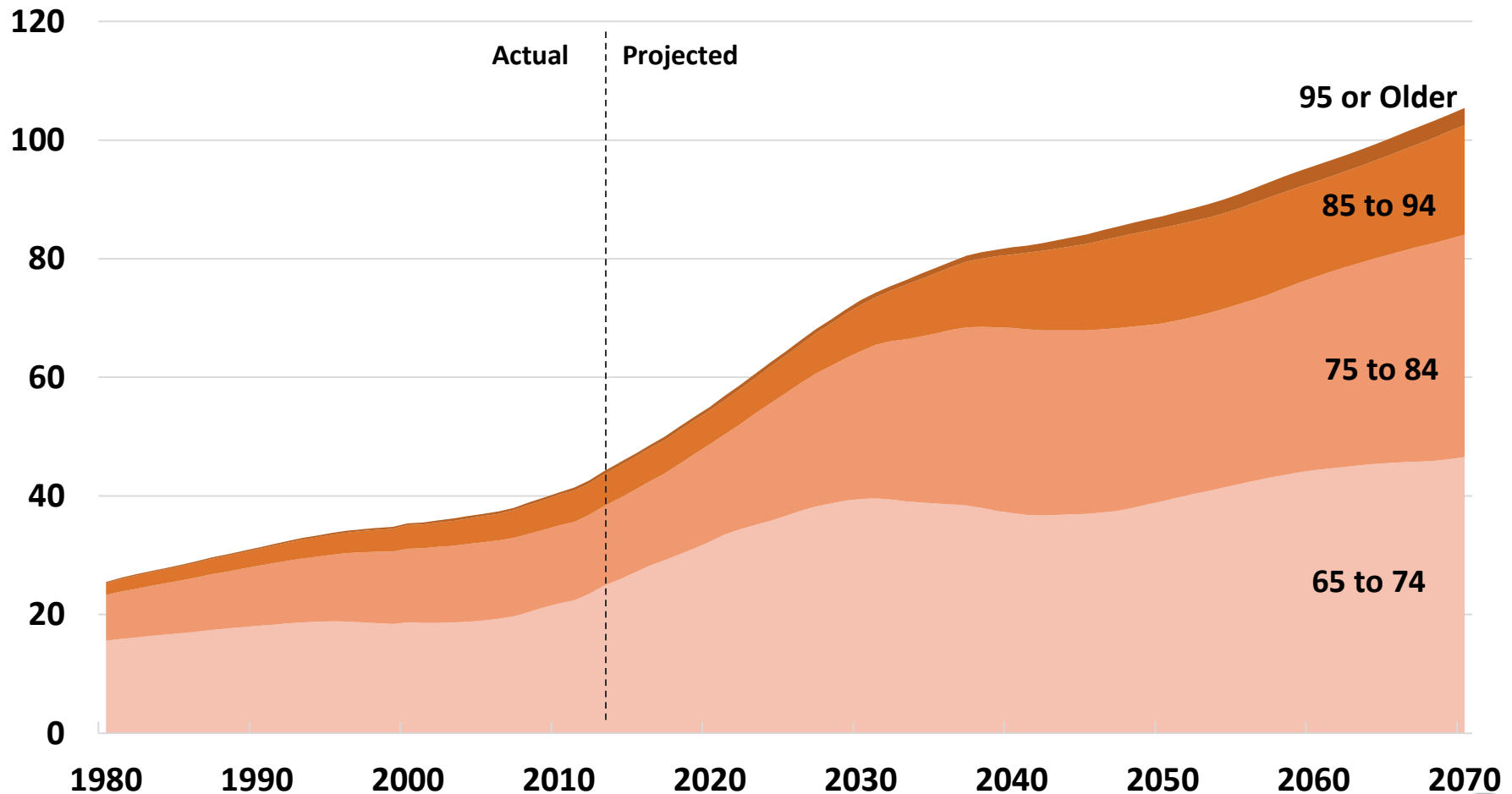


Why the Growth Slowdown?

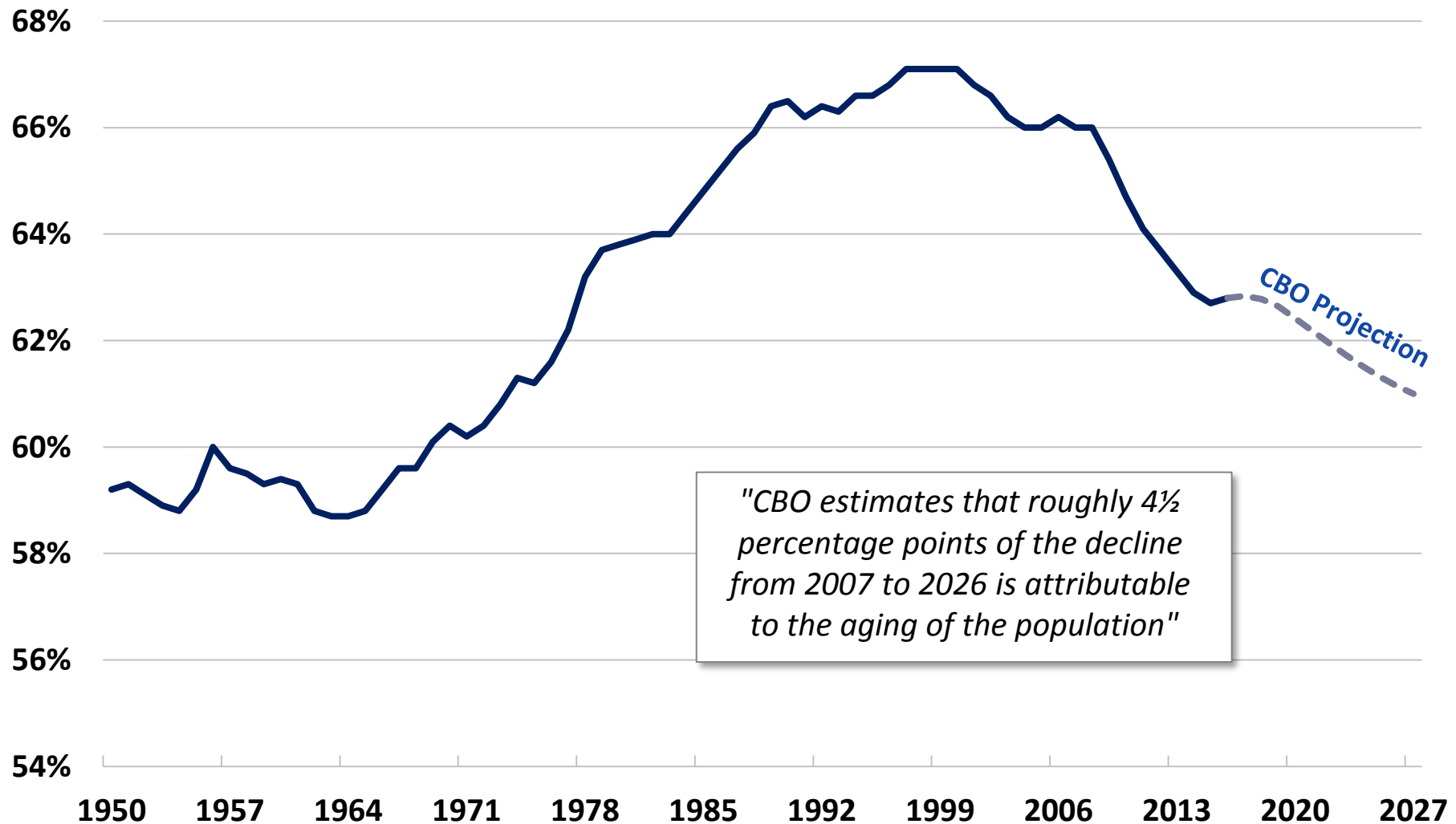
- Real GDP growth is projected to average 1.8 percent per year over the next decade.
- Historically, growth has averaged 3.2 percent annually.
- Labor, capital, and productivity are all growing slower than historically – labor more so than the others.
- The driver of the slowdown is population aging.
 - Aging is responsible for $\frac{3}{4}$ of the decline in labor force growth.
 - Aging may be responsible for much of the capital and productivity slowdown.

America is Getting Older

Population 65 or Older (in Millions)



Historic and Projected Labor Force Participation



Sources: Bureau of Labor Statistics, CBO January 2016 and 2017 baseline

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The Importance of Economic Growth

Faster growth improves many things. It means:

- Higher incomes
- Greater wealth (retirement and other)
- Less unemployment (often)
- Lower deficits and debt
- Greater capacity to borrow

By 2027, **2.5 percent growth** would mean a **10 percent increase in GDP** (over baseline estimates), **\$5,000 increase** in average income, and **\$1.8 trillion** reduction in projected debt.

What Drives Economic Growth?

In the **short run**, the economy is driven by what is spent:

- Consumption
- Investment (capital purchases)
- Government Purchases
- Net Exports

In the **long run**, the economy is driven by its productive capacity:

- Labor (total hours worked)
- Capital (buildings, machinery, software, equipment)
- Productivity (available technology and methods to use capital and labor efficiently)

What Drives Economic Growth?

Labor is driven by:

- Number of prime-age individuals
- Average retirement age
- Percent of working-age individuals working
- Average hours worked per person

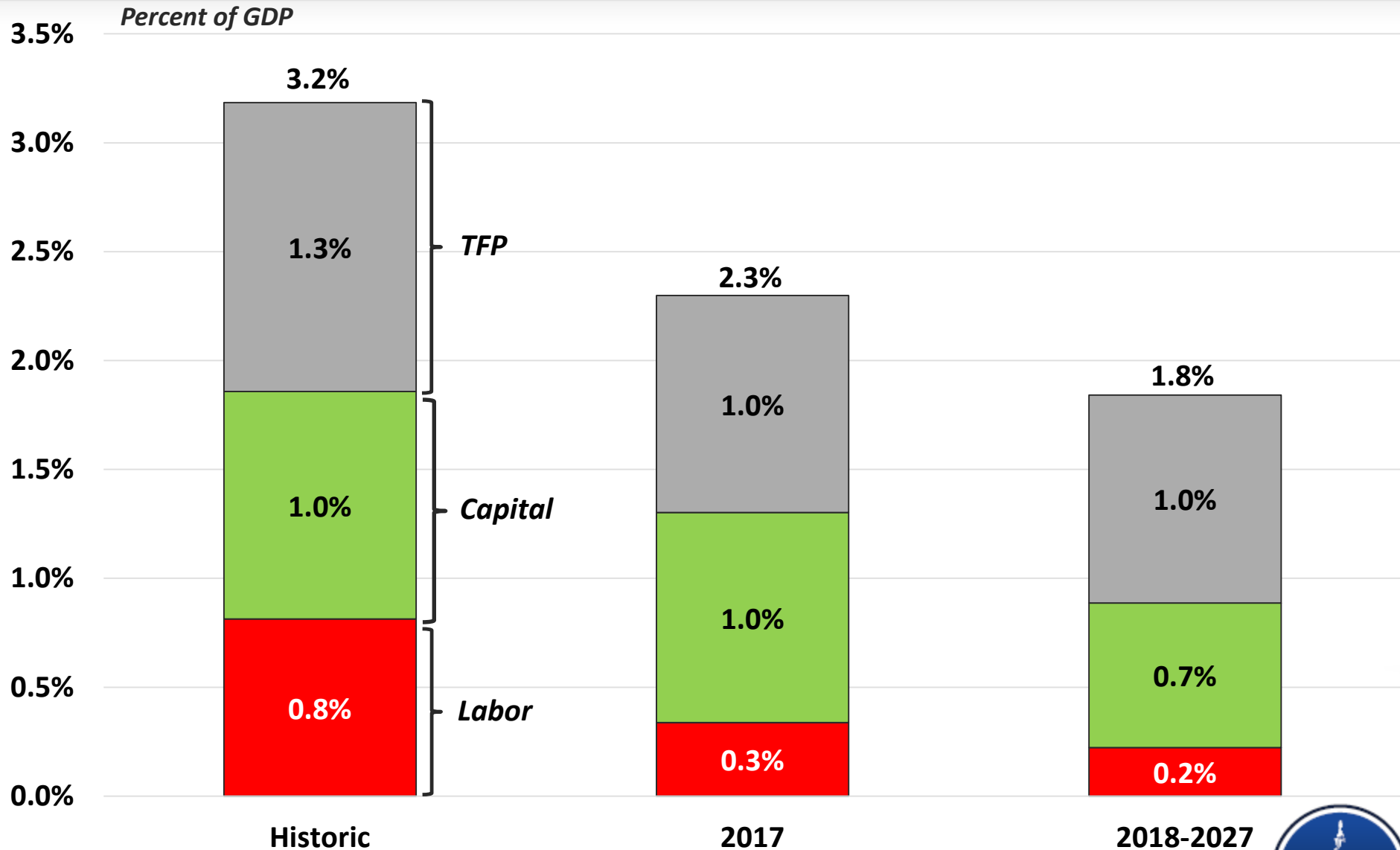
Capital is driven by:

- Total private investment
- National savings (which drives investment)
- Government investments

Productivity is driven by

- Available technology and methods
- Skills and education (human capital)

Can Growth Return to What It Used to Be?



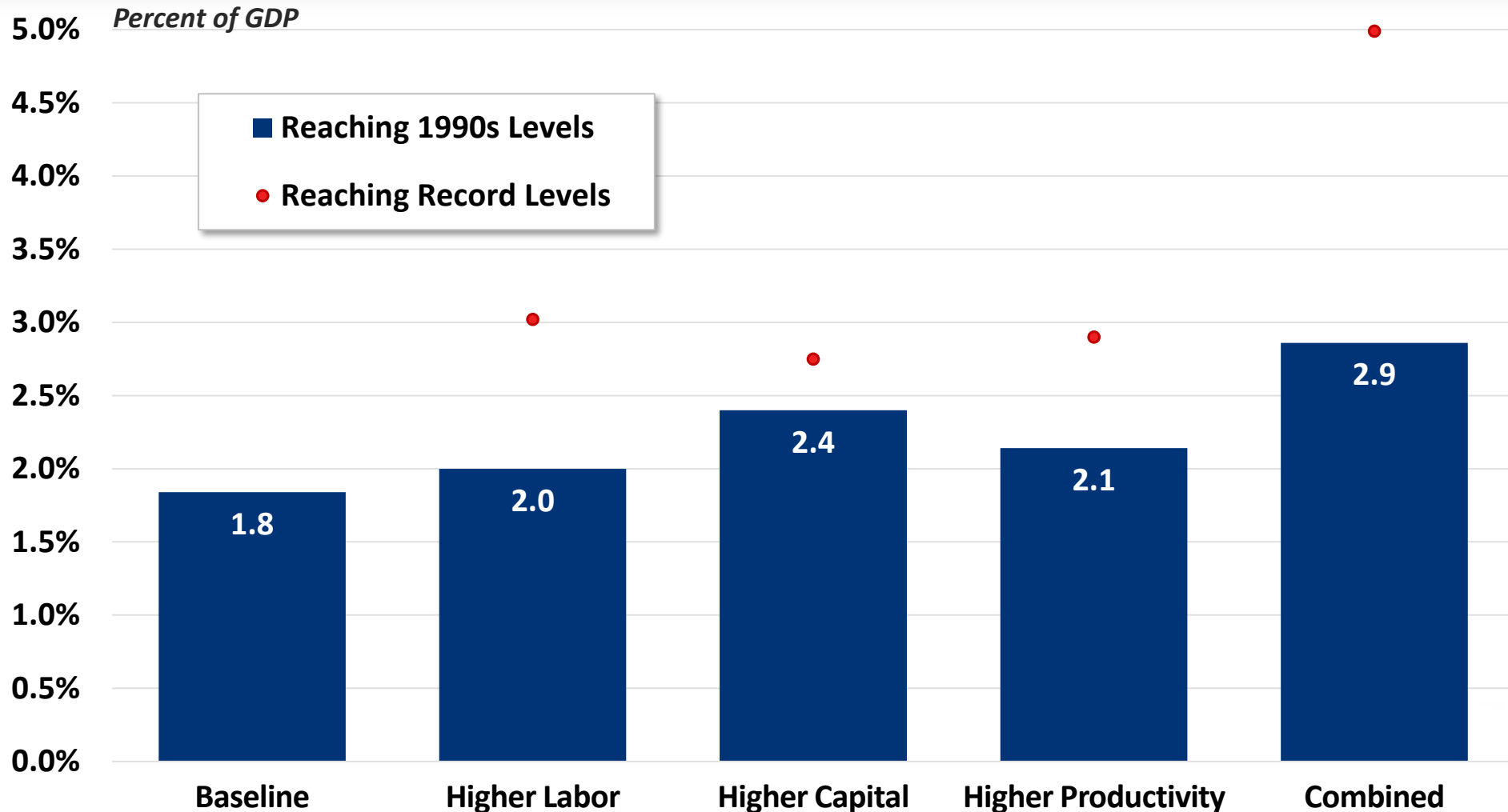
Sources: CBO, CRFB calculations.

TFP=Total Factor Productivity

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Can Growth Return to What It Used to Be?



Source: CRFB calculations of CBO data on historical potential GDP. “Reaching 1990s Levels” shows if each factor grows annually by the average of the 1990s. “Reaching Record Levels” shows if each factor grows at the average of the decade in which that factor grew the fastest.

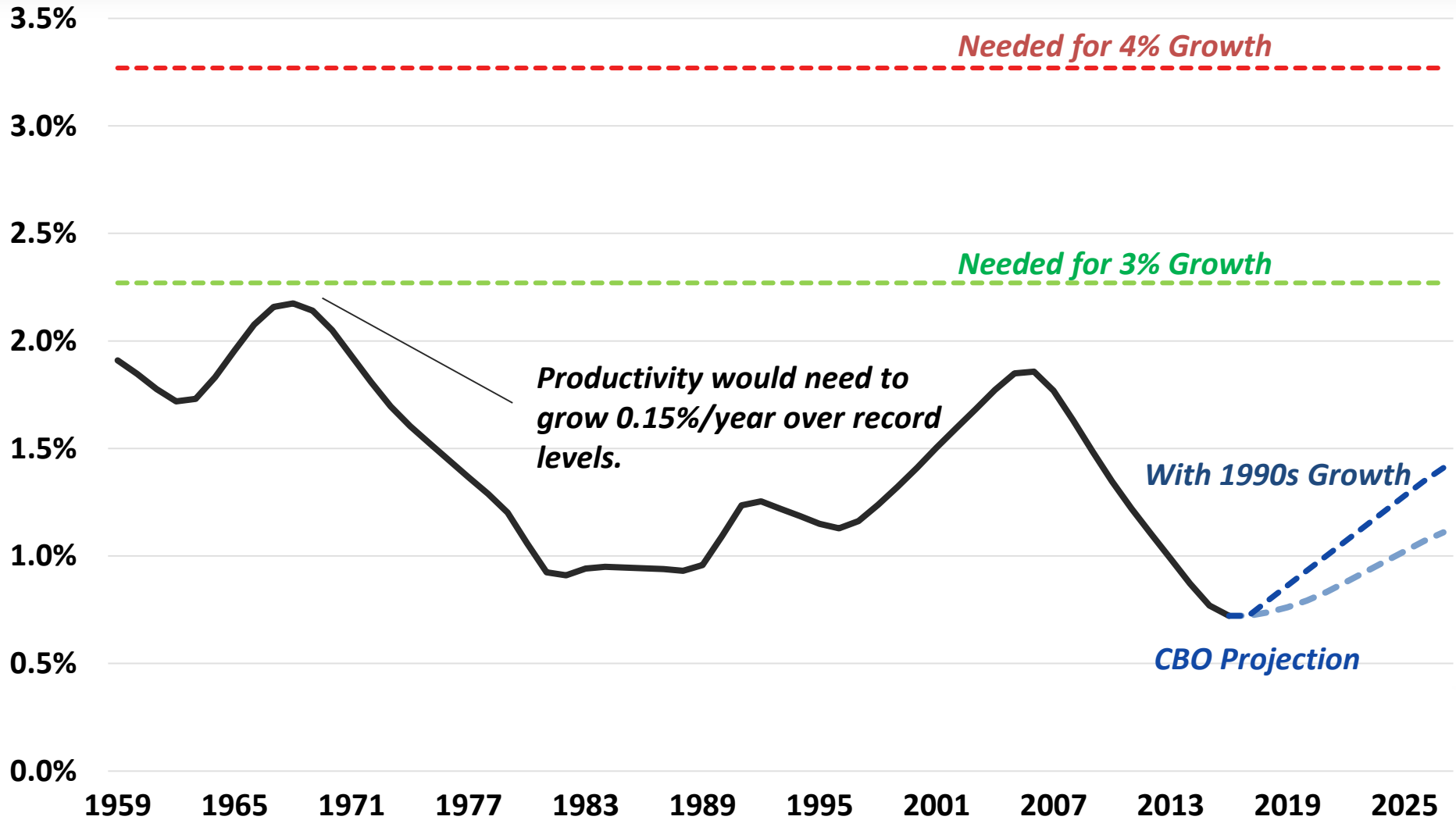
*Note that reaching historic highs for labor force growth is likely impossible given aging of the workforce.



Here's What We Did...

1. Using CBO data, we estimated historic and projected growth labor (hours), capital, and total factor productivity.
 - CBO data mostly covers “potential GDP growth” and for “non-farm business” sector. We adjusted data to approximate actual GDP growth for the entire economy.
2. We used a standard Cobb-Douglas production function and converted inputs into growth components.
3. We adjusted one component at a time based on historic experience, holding others equal, and measured the impact on real GDP growth.

Productivity Growth (ten-year rolling average)

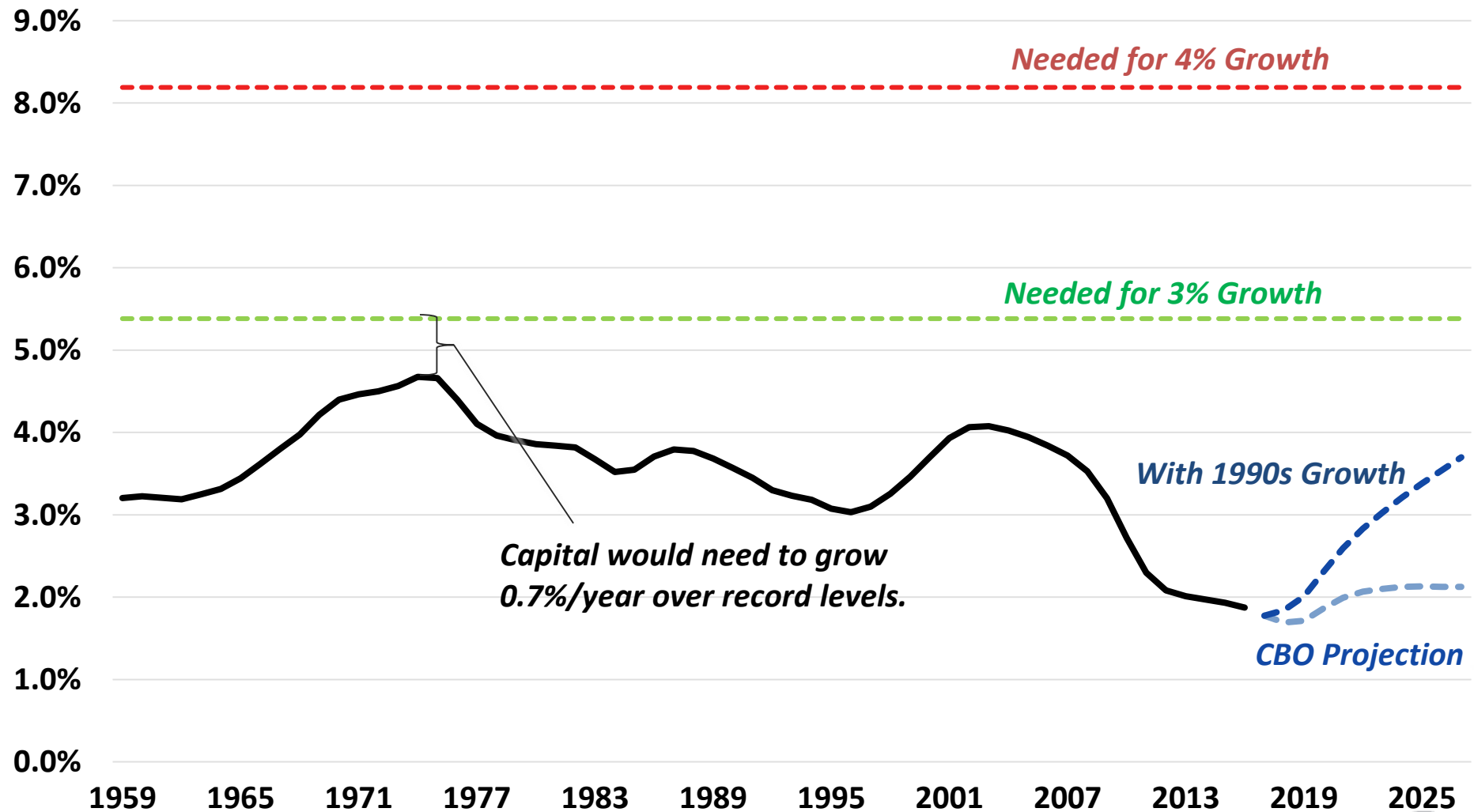


Sources: CBO January 2017 baseline, CRFB calculations.
Data shown is the potential non-farm business sector.

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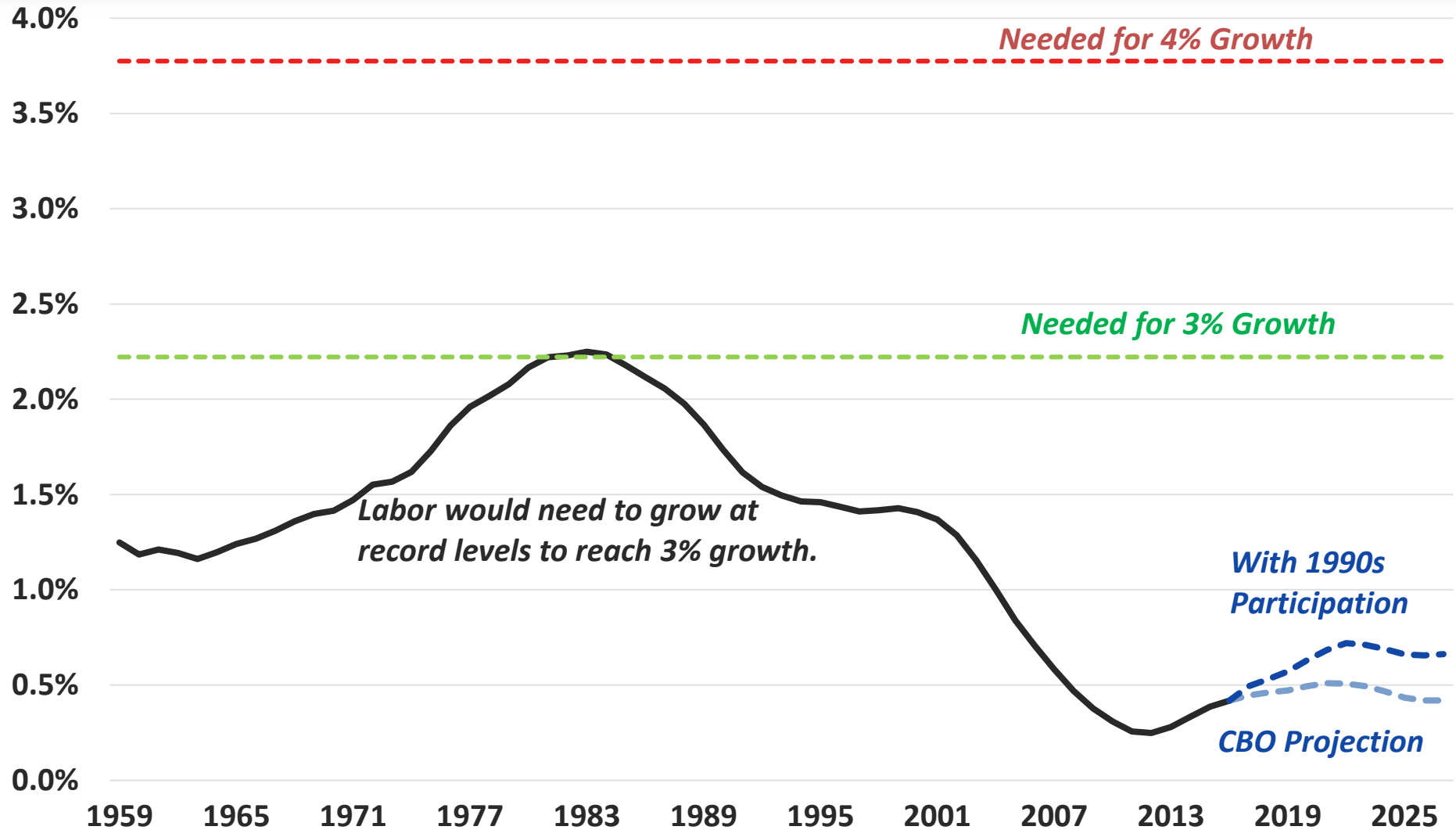
Capital Growth (ten-year rolling average)



Sources: CBO January 2017 baseline, CRFB calculations.
Data shown is the potential non-farm business sector.



Labor Growth (hours) (ten-year rolling average)



Sources: CBO January 2017 baseline, CRFB calculations.
Data shown is the potential non-farm business sector.

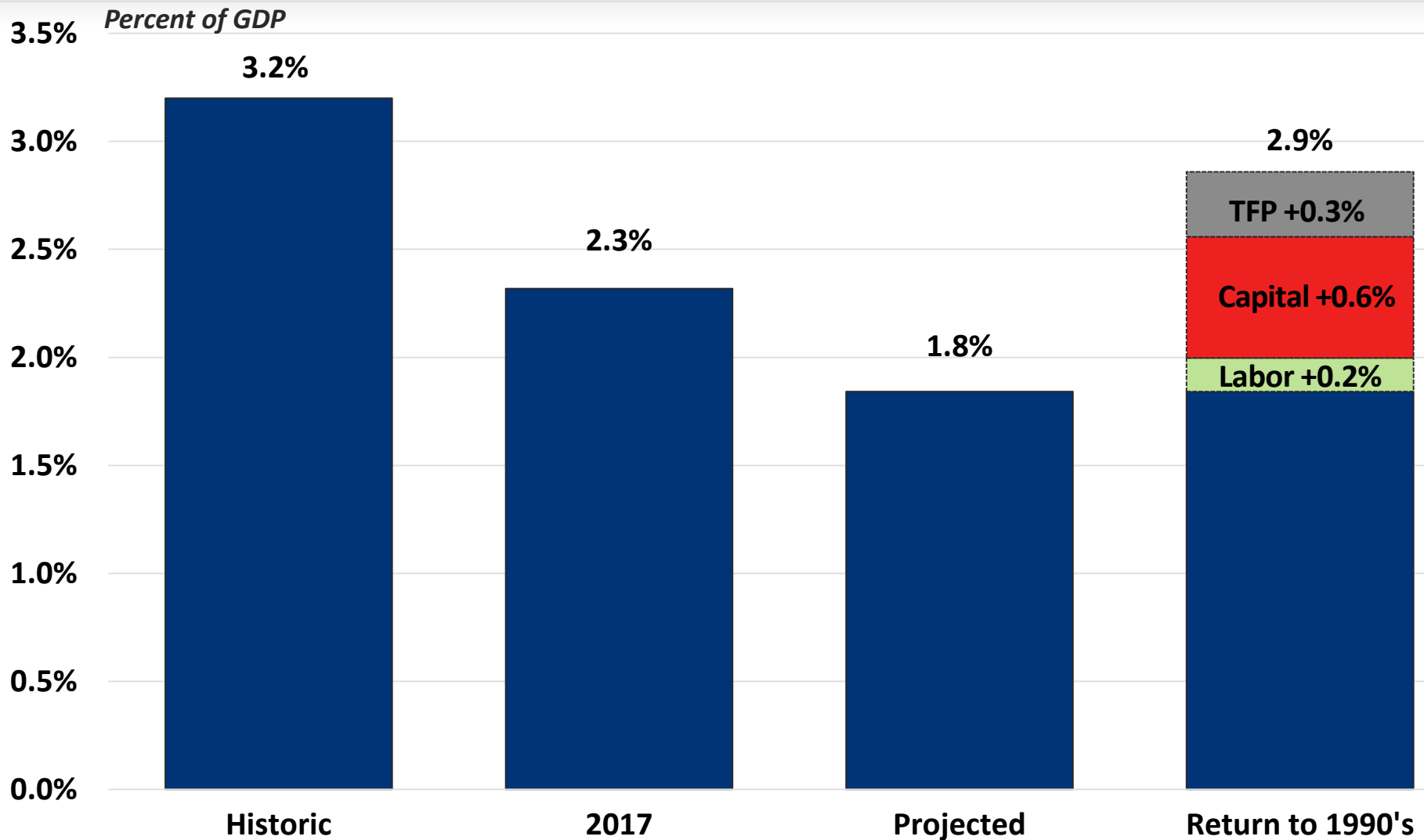


But Labor Can't Grow at Record Levels

Slowdown in labor force growth driven by (in order):

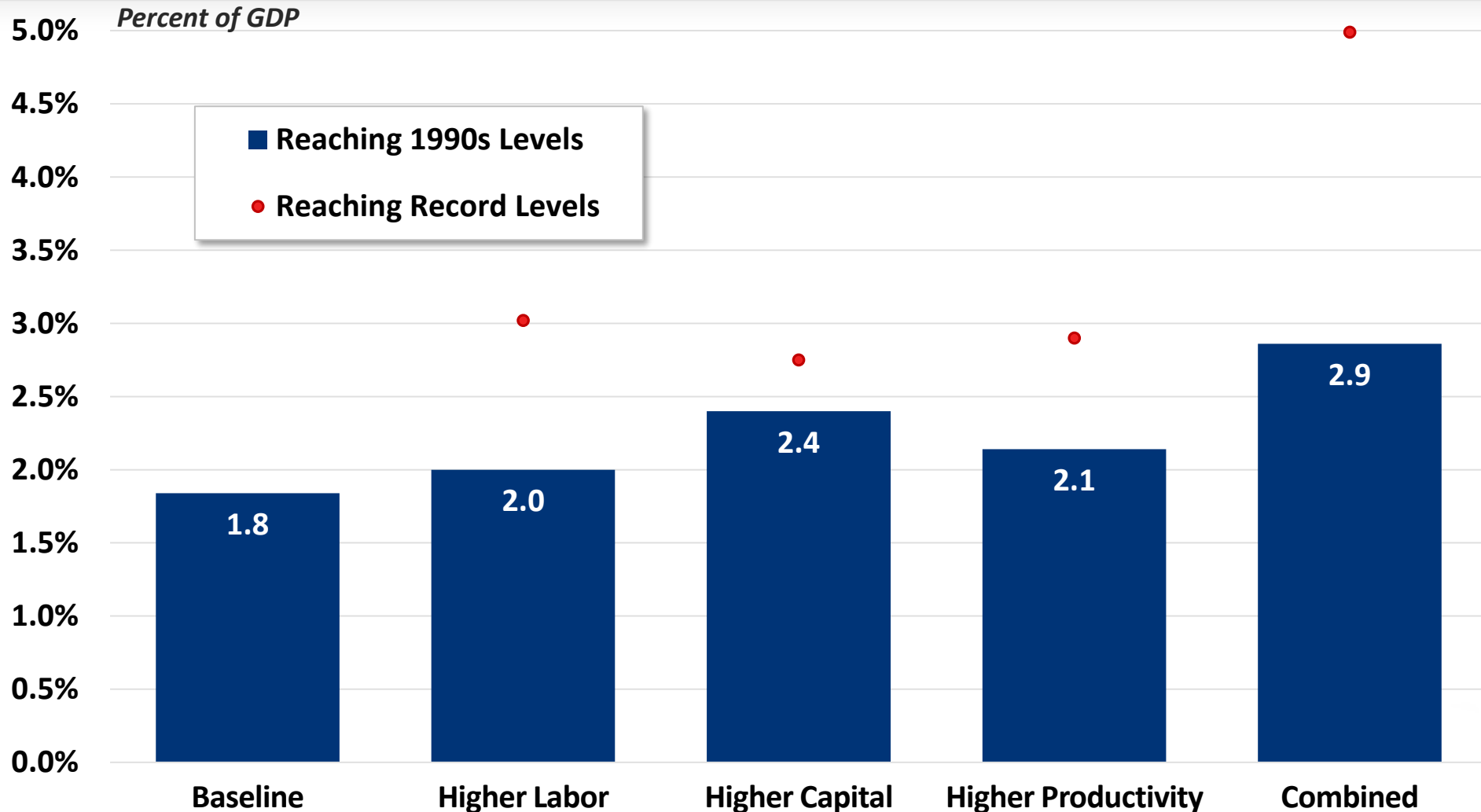
1. Aging population
2. Saturation of women in workforce
3. Reduction of labor force participation among prime-age men
4. Reduction in hours worked

Back to the Future (i.e. the 1990s)



Source: CRFB calculations of CBO data on historical potential GDP and the non-farm business sector. TFP = total factor productivity.

Can Growth Return to What It Used to Be?



Source: CRFB calculations of CBO data on historical potential GDP. “Reaching 1990s Levels” shows if each factor grows annually by the average of the 1990s. “Reaching Record Levels” shows if each factor grows at the average of the decade in which that factor grew the fastest.

*Note that reaching historic highs for labor force growth is likely impossible given aging of the workforce.



What Do Official Government Sources Say Can Grow the Economy, and By How Much?

Policy Change	Boost in Annual Growth Rate	Estimated by:
Enact immigration reform to increase number of workers	0.3%	<u>CBO</u>
Reform the income tax code	0.05% - 0.3%	<u>JCT, Treasury</u>
Increase the Social Security ages by two years	0.15%	<u>CBO</u>
Reduce deficits by \$4 trillion over ten years	0.1%	<u>CBO</u>
Expand energy production at level of shale boom*	0.09%	<u>CBO</u>
Repeal the ACA ("Obamacare")	0.08%	<u>CBO</u>
Ratify the Trans-Pacific Partnership	0.01%	<u>U.S. ITC</u>
Increase public investment in infrastructure, education, and research by \$400 billion	0 - 0.01%	<u>CBO</u>

Most of these estimates were for a given growth over a specified period (e.g., the economy would be 1 percent bigger after ten years). For comparison, we converted all to a compound annual average growth rate, generally using ten-year scores over the period when the policy was actually being implemented.

**Shale boom indicates estimates of the effect of the ongoing boom in shale exploration (which are already included in the baseline).*



What About Short-Run Growth?

- Growth can vary tremendously year to year
 - Average historic growth = 3.2%
 - Record high year = 8.7% (1950)
 - Record low year = -2.8% (2009)
- Stimulus can offer a temporary boost
 - CBO: \$15 billion of infrastructure in 2016 -> +0.1% GDP
 - TPC: \$350 billion of tax cuts in 2017 -> +1.0% GDP
- With economy at full employment (~4.5% unemployment rate), stimulus boost will reverse itself over time
- Higher debt from stimulus leads to slower long-term growth

Thought of another way, many of the policies that could boost near-term growth would do so simply by borrowing that growth - effectively with interest - from future years.



So What Should We Do?

- **Be aspirational in policymaking - work toward achieving as much growth as possible.**
 - Even a small increase in growth rates makes a big difference.
- **Be realistic about what will be achieved and conservative on what is assumed.**
- **Focus on the long term, where growth really matters.**
 - There is some advantage to borrowing at today's low interest rates and financing initiatives over time

Ways to Improve Growth

To expand labor for growth:

- Enact tax reform to encourage work.
- Increase immigration.
- Reform entitlement programs and other policies to encourage delayed retirement.
- Expand vocational assistance programs.
- Modify means-tested and disability programs to support those who remain at or return to work.
- Expand the availability of child care for working parents.
- Reform regulations that discourage hiring.

Ways to Improve Growth

To expand capital for growth:

- Pursue tax reform, with a particular focus on business tax reform meant to spur capital investments.
- Reform entitlements to more incentivize individual savings, which could also help spur private investment.
- Shift the budget's focus from consumption to investment – particularly in public infrastructure.
- Manage our high and growing national debt.
- Enact regulatory reforms to reducing barriers to business access to capital and returns to investment.

Ways to Improve Growth

To expand productivity for growth:

- Increase spending on research and development.
- Offer tax incentives for innovation.
- Provide loans or loan guarantees for the development of new technologies.
- Improve the patent system, and/or reform regulations that might be hurting innovation.
- Improve the quality of, and participation in, education; expand worker training and lifelong learning programs; promote apprenticeships.
- Increase high-skilled immigration.

Read Our Papers on Growth

How Fast Can America Grow?:

<http://www.crfb.org/papers/how-fast-can-america-grow>

Policies to Grow the Economy:

<http://www.crfb.org/papers/policies-to-grow-economy>

CBO Economic Forecast Sees Major Headwinds:

<http://www.crfb.org/blogs/cbo-economic-forecast-sees-major-headwinds-facing-growth>

Federal Investment is Good for Long-Term Growth, If It's Paid For -

<http://www.crfb.org/blogs/cbo-federal-investment-good-long-term-growth-if-its-paid>



**For More Information,
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